

WHAT IS CLAIMED IS:

1. A method for displaying digital images of a body part or parts, comprising the steps of:

defining a region of interest on each image embracing the body part;

aligning the regions of interest; and

simultaneously displaying the images with the regions of interest aligned.

2. The method of claim 1, in which the images are images of a patient's breasts.

3. The method of claim 1 wherein the region of interest is a rectangular region of the image of a minimum surface area to cover the body part.

4. The method of claim 3 wherein the region of interest is a rectangular region of the image of a minimum surface area to cover the body part.

5. The method of claim 1 wherein the images are displayed side by side and in which the alignment comprises the steps of:

comparing a vertical dimension of the region of interest on each image,
and

if the vertical dimensions are identical, performing vertical alignment of an upper or lower edge of the regions of interest.

6. The method of claim 2 wherein the images are displayed side by side and in which the alignment comprises the steps of:

comparing a vertical dimension of the region of interest on each image,
and

if the vertical dimensions are identical, performing vertical alignment of an upper or lower edge of the regions of interest.

7. The method of claim 3 wherein the images are displayed side by side and in which the alignment comprises the steps of:

comparing a vertical dimension of the region of interest on each image,
and

if the vertical dimensions are identical, performing vertical alignment of an upper or lower edge of the regions of interest.

8. The method of claim 1 wherein the images are displayed side by side, and in which the alignment comprises the steps of:

comparing a vertical dimension of the region of interest of each image;

if the vertical dimensions are different, calculating an optimization criterion which is a function of relative image position; and

aligning the images while maximizing this criterion.

9. The method of claim 2 wherein the images are displayed side by side, and in which the alignment comprises the steps of:

comparing a vertical dimension of the region of interest of each image;

if the vertical dimensions are different, calculating an optimization criterion which is a function of relative image position; and

aligning the images while maximizing this criterion.

10. The method of claim 3 wherein the images are displayed side by side, and in which the alignment comprises the steps of:

comparing a vertical dimension of the region of interest of each image;

if the vertical dimensions are different, calculating an optimization criterion which is a function of relative image position; and

aligning the images while maximizing this criterion.

11. The method of claim 8, wherein calculation of an optimization criterion comprises calculating correlation.

12. The method of claim 8, wherein calculation of an optimization criterion comprises calculating correlation.

13. The method of claim 8, wherein calculation of an optimization criterion comprises calculating correlation.

14. The method of claim 8, wherein calculation of an optimization criterion comprises aligning body part contours.

15. The method of claim 8, wherein calculation of an optimization criterion comprises aligning body part contours.

16. The method of claim 8, wherein calculation of an optimization criterion comprises aligning body part contours.

17. The method of claim 1 further comprising, prior to the display step, enlargement of the images using a common magnification factor.

18. The method of claim 17, wherein the region of interest of each image after enlargement is contained within the image displayed.

19. An apparatus for simultaneously displaying digital images of a body part or parts, comprising:

a unit for digital image acquisition;

an image processing unit receiving digital images supplied by the acquisition unit;

a display device for simultaneously displaying digital images processed by the processing unit, wherein images image processing unit comprises:

a region of interest defining block for defining a region of interest in an image; and

an alignment block for aligning the regions of interest of the two images.

20. The apparatus of claim 19, wherein the image processing unit further comprises an enlargement block for enlarging the digital images using the same magnification factor.